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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/964,034	09/26/2001	John A. M. Cameron	WEAT/0151	9883
36735	7590	06/22/2004	EXAMINER	
MOSER, PATTERSON & SHERIDAN, L.L.P. 3040 POST OAK BOULEVARD, SUITE 1500 HOUSTON, TX 77056-6582			HALFORD, BRIAN D	
			ART UNIT	PAPER NUMBER
			3672	

DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/964,034

Applicant(s)

CAMERON, JOHN A. M.

Examiner

Brian D Halford

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 10, 19-29 and 31-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31 and 32 is/are allowed.
- 6) ☒ Claim(s) 1-3, 10, 19-29 and 33-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-3, 22-23, 29, 33-35, 41, 48-52 and 56-58 are rejected under 35 U.S.C. 102(e) as being anticipated by Castano-Mears *et al.* The patent to Castano-Mears *et al.* disclose numerous expandable well screen embodiments and an associated method of use. With reference to lines 45-52 *and* 45-55, 63-64 of respective columns 1 *and* 3, the well screen embodiments expand radially outwardly to substantially contact a casing, a consolidated formation or an unconsolidated formation; furthermore, the expandable well screen embodiments possess enhanced torsional and tensile strength to prevent the costly collapse of an unconsolidated formation. A particular embodiment of the expandable well screen relied upon in the instant rejection is illustrated in Figures 5-7; moreover, drawing figures 1A (unexpanded) and 1B (expanded) depict a method of use. The attendant features of the expandable well screen are disclosed in lines 9-67 of column 7. With reference to aforementioned lines of column 7, the expandable well screen (60) possesses, *inter alia*, inner and outer walls, a perforated base pipe and a filter media (66) that envelops the base pipe. The connectors (72) are employed to connect the filter media (66); consequently, the connectors (72) create a, "convenient location [*sic*]" *or* recess within the outer wall of the expandable well screen (60). As specifically disclosed in lines 6-11 *and* 62 of

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respective columns 2 *and* 7, communication lines (74) reside externally of the location *or* recess; thus, the communication lines (74) reside *within* the location *or* recess. With emphasis on lines 55-59 of column 7, communication lines (74) may include hydraulic lines for delivering or returning fluid downhole, chemical injection lines, electric lines for communicating data or transmitting power downhole and communication lines, which include fiber-optic lines. Furthermore, Castano-Mears *et al.* teach in lines 59-61 that *any* type of line (74) can be employed in combination with the principles of the invention.

With regard to independent method claims 29 and 56, as discussed in lines 45-46 of column 3, Castano-Mears *et al.* disclose a method (10) in Figures 1A and 1B. The various types of lines (74) and their associated uses have been discussed *supra*. However, for Applicant's convenience, lines 55-61 of column 7 specifically disclose myriad communication lines (74) that are employed in conjunction with the expandable well screen (60). With reference to lines 57-58 of the noted column, an electric line communicates data and transmits power to a downhole tool.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 36-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Castano-Mears *et al.* The merits of the disclosure of the patent to Castano-Mears *et al.* has been discussed *supra*. Castano-Mears *et al.* fail to illustrate the placement of the recess as specifically called for in claim 36. However, Castano-Mears *et al.* explicitly

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disclose in lines 62-67 of column 7 modifying the placement of the communication lines (74). Thus, the communication lines (74) may alternatively reside *below* the filter media (66) connector (72) thereby forming a recess wherein between the inner and outer walls of the expandable well screen (60). As mentioned in the noted passages, the communication lines (74) take residence in a *distinct* hollow connector. Therefore, it would have been considered obvious to a person having ordinary skill in the art, at the time the invention was made, to modify the well screen of Castano-Mears *et al.* to reflect a recess disposed in the thickness created by the outer and inner surfaces of the expandable well screen, as taught by Castano-Mears *et al.*, to realize design specifications necessitated by the peculiar conditions of a particular wellbore; furthermore, it would have been obvious to one having ordinary skill in the art since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

4. Claims 10, 19-21, 24-28, 42-47 and 53-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Castano-Mears *et al.* in view of Pringle *et al.* ('472). The disclosure of the patent to Castano-Mears *et al.* has been discussed *supra*. However, Castano-Mears *et al.* fail to explicitly disclose a deformable encapsulation; furthermore, Castano-Mears *et al.* fail to explicitly disclose Applicant's various encapsulation and recess geometries as called for in claims 19-21, 25, 27-28 and 54-55.

The patent to Pringle *et al.* disclose communication lines enveloped by a deformable encapsulation that is disposed within a recess in the outer wall of coiled

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tubing. The Abstract and drawing figures 9 and 12 are pertinent to this rejection. Lines 17-32, 46-67 *and* 43-64 of respective columns 1 *and* 5 are of particular interest in this instant rejection. Referring to the entire disclosure, the deformable encapsulation secures and protects numerous communications lines (i.e. hydraulic, control, electrical, etc) from damage or breakage. The communication lines actuate downhole tools in addition to possessing other numerous functions. With reference to Figure 9 and lines 59-64 of column 5, a plastic cover *or* deformable encapsulation (68) resides within a signal transmitting passageway *or* recess (14f) that is formed between the outer wall (19f) and the inner wall (17f) of the coiled tubing (12f). The plastic cover *or* deformable encapsulation (68) envelops numerous communication lines (58f). With reference to Figure 9 and lines 53-58,61-64 of column 5, the indicated cross-sectional geometry (64) affords an inexpensive means for securely fastening the plastic cover *or* deformable encapsulation (68) with the signal transmitting passageway *or* recess (14f). The plastic cover *or* deformable encapsulation (68), which envelops the communication lines (58f), is, "inexpensively snapped into place [*sic*]." It is noted that the cross-sectional geometry (64) of the signal transmitting passageway *or* recess (14f), in addition to the complimentary cross-sectional geometry of the plastic cover *or* deformable encapsulation (68), as illustrated in Figure 9 satisfies Applicant's claimed geometries as noted *supra*. Additionally, as noted in lines 57-62 of column 1, the placement of the signal transmitting passageway *or* recess (14f) within the outer wall was selected in part to facilitate the passage of well tools through the bore. Communication lines within the bore may interfere with passage of well tools; consequently, the communication lines

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may become damaged. Therefore, it would have been considered obvious to a person having ordinary skill in the art, at the time the invention was made, to modify the well screen of Castano-Mears *et al.* to reflect a recess in the outer wall possessing a cross-sectional geometry for receiving a deformable encapsulation of complimentary cross-sectional geometry, as taught by Pringle *et al.*, to protect communication lines from damage *and* to provide an inexpensive means for robustly attaching the line-embedded encapsulation to the outer wall of the well screen.

Allowable Subject Matter

5. Claims 31-32 are allowed.

Response to Arguments

6. Applicant's arguments with respect to claims 1-3, 10, 19-29 and 33-36 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D Halford whose telephone number is (703) 306-0556. The examiner can normally be reached on M-F 10:30-8:00; alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J Bagnell can be reached on (703) 308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

bdh
June 14, 2004



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